

1        **CLAIMS**

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3            1.        A method, comprising:

4                selecting combinable navigation contexts for creating a navigable sequence

5 of television programs;

6                logically combining the navigation contexts;

7                querying a database of television programming metadata for television

8 program identifiers associated with the combined navigation contexts; and

9                presenting a sequence of television programs associated with the identifiers

10 for navigation.

11

12            2.        The method as recited in claim 1, wherein the querying is performed

13 by one or more predefined queries and each predefined query is associated with a

14 combinable navigation context.

15

16            3.        The method as recited in claim 2, wherein the predefined queries

17 comprise predefined query strings.

18

19            4.        The method as recited in claim 2, wherein links for launching the

20 one or more predefined queries are associated with television program content.

21            .

22            5.        The method as recited in claim 4, wherein the television program

23 content is included in a conventional broadcast television show.

24

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1           6.     The method as recited in claim 4, wherein the television program  
2 content is included in one of an on-demand television show or an on-demand  
3 television movie.

4  
5           7.     The method as recited in claim 4, wherein the television program  
6 content is included in television musical programming.

7  
8           8.     The method as recited in claim 4, wherein a link is selectable while  
9 the television program content is playing.

10  
11          9.     The method as recited in claim 2, wherein links for launching the  
12 one or more predefined queries are associated with television program metadata.

13  
14          10.    The method as recited in claim 9, wherein a link is selectable while  
15 the television program metadata is displayed.

16  
17          11.    The method as recited in claim 2, wherein navigation controls  
18 perform the navigating.

19  
20          12.    The method as recited in claim 11, wherein the navigation controls  
21 select one or more of the combinable navigation contexts.

22  
23          13.    The method as recited in claim 12, further comprising using at least  
24 one of the combinable navigation contexts as a logical filter.

25

1           14. The method as recited in claim 13, further comprising logically  
2 combining with Boolean operators.

3  
4           15. The method as recited in claim 14, wherein the Boolean operators  
5 are applied automatically based on an association between a link for launching a  
6 predefined query corresponding to a navigation context and the television program  
7 content associated with the link.

8  
9           16. The method as recited in claim 14, wherein the Boolean operators  
10 are applied automatically based on an association between a link for launching a  
11 predefined query corresponding to a navigation context and the television program  
12 metadata associated with the link.

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14           17. The method of claim 1, further comprising navigating the sequence,  
15 wherein the navigating comprises using a navigation control to change from  
16 playing a currently playing program in the sequence to playing another program in  
17 the sequence.

18  
19           18. A method, comprising:  
20 defining a query for television programming metadata, wherein if the query  
21 is launched, then the query uses one or more attribute values from a television  
22 program context from which the query was launched to produce a list of television  
23 program identifiers associated with the one or more attribute values;

24           arranging the television programming metadata into a data structure  
25 wherein attribute values are associated with program identifiers; and

1 providing a user interface, wherein a navigation control selects whether to  
2 launch the query and if launched, designates one or more attribute values from the  
3 television program context.

4  
5 19. The method as recited in claim 18, wherein the television program  
6 context is a television program currently being displayed.

7  
8 20. The method as recited in claim 18, wherein the television program  
9 context is program guide information associated with a television program.

10  
11 21. The method as recited in claim 18, wherein the television program  
12 context is an order form for ordering an on-demand television program.

13  
14 22. The method as recited in claim 18, further comprising if the query is  
15 launched, then using the navigation control to access television programs  
16 associated with television program identifiers on the list.

17  
18 23. The method as recited in claim 22, further comprising playing each  
19 television program in response to the navigation control accessing the television  
20 program.

21  
22 24. The method as recited in claim 22, further comprising displaying  
23 program information for each television in response to the navigation control  
24 accessing the television program.

1           25.    The method as recited in claim 22, further comprising:  
2            pausing a first television program at a pause point in response to the  
3 navigation control accessing a second television program on the list; and  
4            resuming the first television program at the pause point in response to the  
5 navigation control accessing the first television program.

6  
7           26.    The method as recited in claim 18, further comprising defining  
8 multiple queries for television programming metadata, wherein multiple queries  
9 are capable of being logically combined.

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11          27.    The method as recited in claim 26, wherein the multiple queries are  
12 logically combined through Boolean logic operators.

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14          28.    The method as recited in claim 27, wherein the Boolean operators  
15 are designated by the television program context.

16  
17          29.    A multi-axis television navigation system, comprising:  
18            a server for storing and accessing digital television programming content;  
19            a navigation control for changing a currently playing television program to  
20 a television program provided by the server and for selecting links to launch  
21 predefined queries, wherein each predefined query queries a database based on a  
22 television program attribute and returns a navigation axis comprising a list of  
23 program identifiers of programs corresponding to a value for the television  
24 program attribute;  
25            a means for storing television program metadata in a database,

1 a means for arranging the program metadata in a relational schema,  
2 a means for defining and storing the pre-defined queries; and  
3 a means for embedding links to the pre-defined queries in logically  
4 associated metadata for a currently playing television program.  
5

6 30. The multi-axis television navigation system as recited in claim 29,  
7 further comprising a means logically combining multiple predefined queries.  
8

9 31. The multi-axis television navigation system as recited in claim 30,  
10 further comprising a means for selecting more than one link in order to logically  
11 combine multiple predefined queries.  
12

13 32. The multi-axis television navigation system as recited in claim 29,  
14 wherein the relational schema adheres at least in part to a global listings format.  
15

16 33. A television navigation engine, comprising:  
17 a database for television program metadata;  
18 a query engine to find identifiers in the database corresponding to  
19 predefined queries, wherein a predefined query returns a navigational axis from  
20 the database, wherein a navigational axis is a list of identifiers of television  
21 programs;

22 a user interface to associate launch of one or more of the predefined queries  
23 with selection of one or more attributes of a currently playing television program  
24 or currently displayed metadata of the television program;  
25

1 an axis cache to store the list of identifiers returned by one or more  
2 predefined queries; and

3 a navigation controller associated with the user interface to select the  
4 attributes launching the predefined queries and to play television programs  
5 corresponding to the identifiers on the list.

6  
7 34. The television navigation engine as recited in claim 33, further  
8 comprising a combiner to combine selected attributes for launching multiple  
9 predefined queries.

10  
11 35. The television navigation engine as recited in claim 34, wherein the  
12 navigation controller is on a remote controller.

13  
14 36. A multi-axis database schema, comprising:  
15 instructions for arranging a database of television programming metadata  
16 into indices facilitating predefined queries;  
17 wherein one or more links contextually associated with one or more  
18 attributes of a television program call the predefined queries,  
19 wherein the predefined queries return a list of identifiers from the database  
20 corresponding with one or more of the attributes,  
21 wherein the identifiers correspond to television programs,  
22 wherein the television programs on the list are played in turn as accessed by  
23 a television channel navigation means.

1           37.    The multi-axis database schema as recited in claim 36, wherein the  
2 one or more attributes include one of: type of program, program title, alphabetical  
3 order of title, year of release, channel, time, first air date, episode order, episode  
4 name, genre, actors, writer, director, producer, rating, sound characteristics, video  
5 characteristics, language, subtitles, closeness of match to search criteria, and  
6 popularity.

7  
8           38.    One or more computer readable media containing instructions that  
9 are executable by a computer to perform actions comprising:

10           defining television navigation axes according to attributes of television  
11 programs;

12           linking a predefined database query for one of the axes to a television  
13 program having the attribute that defines the axis;

14           providing a database of television program identifiers associated with the  
15 attributes;

16           providing a means for selecting and launching the predefined database  
17 query, wherein the query returns a list of program identifiers of television  
18 programs having the attribute that defines the axis.

19  
20           39.    The one or more computer readable media as recited in claim 38,  
21 further comprising instructions to cycle through playing the television programs  
22 on the list when a user uses a navigation controller for changing television  
23 channels.